



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/757,146

01/14/2004

Dwight D. Smith

18133

3170

7590

01/20/2010

Michael J. Aronoff
Tyco Technology Resources
Suite 140
4550 New Linden Hill Road
Wilmington, DE 19808

EXAMINER

TORRES RUIZ, JOHALI ALEJANDRA

ART UNIT

PAPER NUMBER

2858

MAIL DATE

DELIVERY MODE

01/20/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/757,146
Filing Date: January 14, 2004
Appellant(s): SMITH, DWIGHT D.

Dwight D. Smith
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed November 25, 2009 appealing from the Office action mailed February 4, 2009.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,844,401	Lee	12-1998
7,299,373	Wulff	11-2007
5,262,710	Taylor	11-1993

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (U.S. Patent Number 5,844,401) and Wulff et al. (U.S. Patent Number 7,299,373).

Claim 1: Lee teaches a housing (3) having a battery receiving cavity, said cavity being profiled to receive at least a battery therein (Fig.3A), electrodes for contacting contacts on the battery for charging the battery (Col.3, Lines 39-41); said housing further comprising an opening through said housing and into said cavity and a gripping member (71) movable transversely into and out of said housing opening (Fig.3A), between a locked (Col.4, Lines 10-12) and unlocked position (Col.4, Lines 19-23), the gripper member (71) being forced transversely into the battery (5) in the locked position for frictionally (friction between gripping member 71 and battery element 51) gripping a battery placed within said cavity (Fig.3A).

Lee does not explicitly teach a cam assembly nor that the gripping member is operatively connected and movable by operation of said cam assembly.

Wulff teaches a cam assembly and a gripping member that is movable by operation of said cam assembly (Col.5, Lines 54-57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have had the teachings of Wulff in the device of Lee to have released or engaged a battery by use of a cam or wheel rotating on a shaft (Col.5, Lines 54-57).

Claim 10: Lee and Wulff teach the limitations of claim 1 as discussed above. Lee teaches the battery receiving cavity is profiled to receive a battery (5) alone (Fig.3A).

Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (U.S. Patent Number 5,844,401) and Wulff et al. (U.S. Patent Number 7,299,373) as applied to claim 10 above, and further in view of Taylor et al. (U.S. Patent Number 5,262,710).

Claim 11: Lee and Wulff teach the limitations of claim 10 as discussed above. They do not explicitly teach said cavity includes guides along the insertion axis of the cavity for holding the battery alone.

Taylor teaches a battery charger comprising guides along the insertion axis of a battery for holding a battery alone (Fig.5). (Col.9, Lines 36-42).

Art Unit: 2858

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have had the teachings of Taylor in the device of Lee to have guided a battery to a charging position (Col.9, Lines 54-61).

Claim 12: Lee, Wulff and Taylor teach the limitations of claim 11 as discussed above. Taylor teaches said guides are comprised of guide grooves along the insertion axis of a battery receiving cavity, and are profiled to receive ribs along an exterior of a battery (Col.9, Lines 36-42).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have had the teachings of Taylor in the device of Lee to have guided a battery to a charging position (Col.9, Lines 54-61).

(10) Response to Argument

Claim 1 is patentable over the combination of Lee and Wulff

With respect to claim 1, the appellant arguments that Lee does not cam the locking member into position.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Art Unit: 2858

Lee does not explicitly teach a cam assembly nor that the gripping member is operatively connected and movable by operation of said cam assembly.

Wulff teaches a cam assembly and a gripping member that is movable by operation of said cam assembly (Col.5, Lines 54-57).

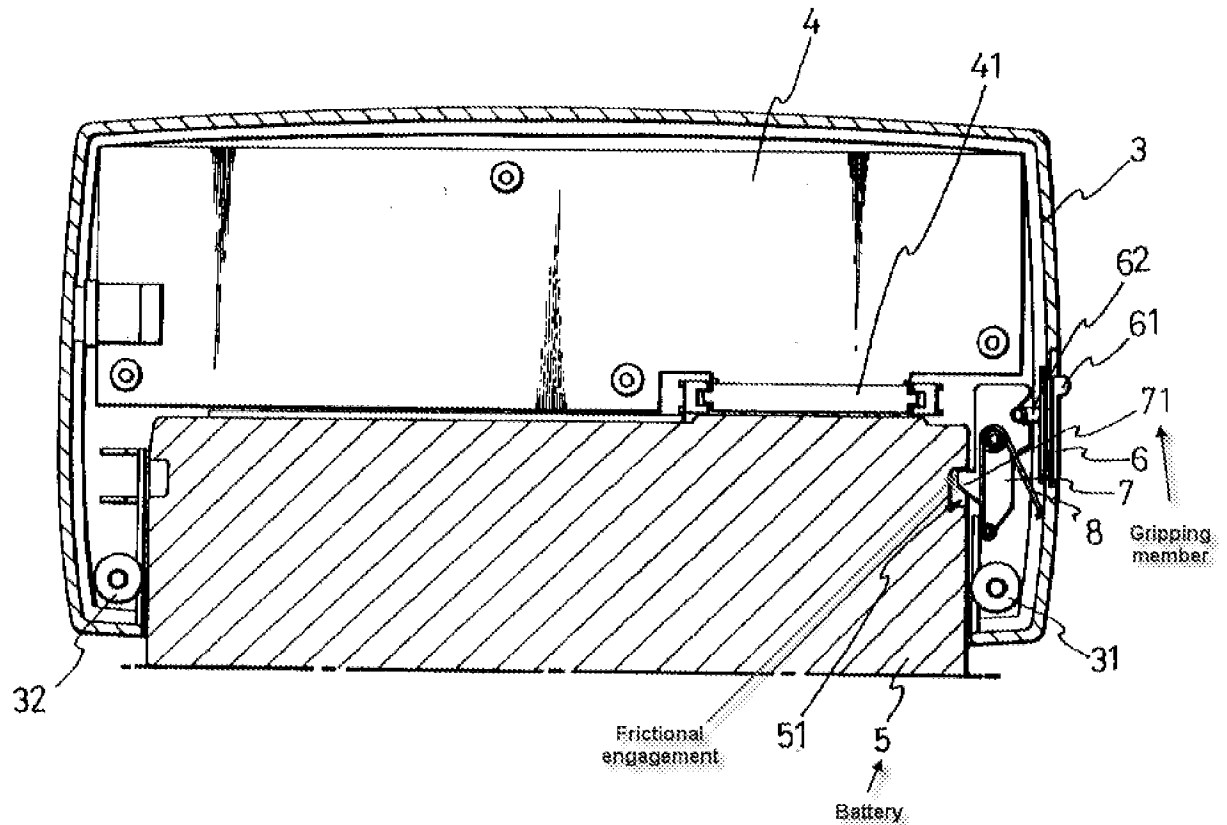
It would have been obvious to one of ordinary skill in the art at the time the invention was made to have had the teachings of Wulff in the device of Lee to have released or engaged a battery by use of a cam or wheel rotating on a shaft (Col.5, Lines 54-57).

The rejection is based on the combination of these references

Appellant argues that Lee does not frictionally engage the battery to retain the battery in place.

In response, when gripping member (71) of the charging device (3) is in contact with battery element 51 there is a resistance of motion that grips the battery in place caused by the friction between both elements (Col.4, Lines 10-12).

FIG. 3A



Appellant argues that Wulff does not show the mechanism including cams or wheels rotating on a shaft, at their ends that can deflect the flex spring sheet causing the release or engagement of a projection on a battery unit.

In response, Wulff teaches and/or shows a mechanism including cams or wheels rotating on a shaft and a gripping member (flex spring sheet) that is movable by operation of said mechanism (Col.5, Lines 49-57).

Appellant argues that the appellants do not require or utilize projections on battery housing or the device itself for retention within the battery charger.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., projections on battery housing or the device itself are not required or utilized for retention within the battery charger) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Appellant argues that the combination of Lee and Wulff would not suggest a cam for moving a gripping member into frictional engagement as claimed.

In response, Lee teaches a housing (3) having a battery receiving cavity, said cavity being profiled to receive at least a battery therein (Fig.3A), electrodes for contacting contacts on the battery for charging the battery (Col.3, Lines 39-41); said housing further comprising an opening through said housing and into said cavity and a gripping member (71) movable transversely into and out of said housing opening (Fig.3A), between a locked (Col.4, Lines 10-12) and unlocked position (Col.4, Lines 19-23), the gripper member (71) being forced transversely into the battery (5) in the locked position for frictionally (friction between gripping member 71 and battery element 51) gripping a battery placed within said cavity (Fig.3A).

Lee does not explicitly teach a cam assembly nor that the gripping member is operatively connected and movable by operation of said cam assembly.

Wulff teaches a cam assembly and a gripping member that is movable by operation of said cam assembly (Col.5, Lines 54-57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have had the teachings of Wulff in the device of Lee to have released or engaged a battery by use of a cam or wheel rotating on a shaft (Col.5, Lines 54-57).

Appellant argues that Lee's latch operates by the use of abutting latches, but it does not have a frictional retaining force as suggested by the Examiner.

In response, when gripping member (71) of the charging device (3) is in contact with battery element 51 there is a resistance of motion that grips the battery in place caused by the friction between both elements (Col.4, Lines 10-12).

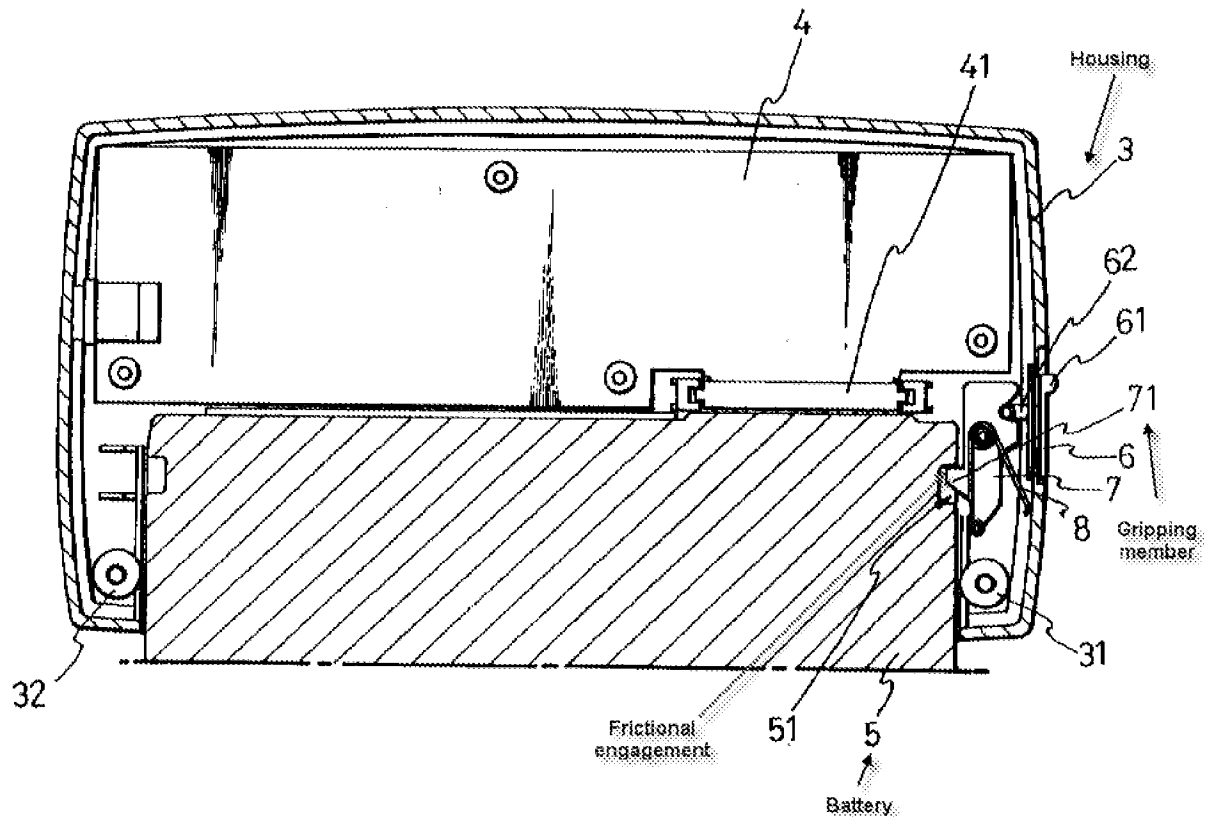
Appellant argues that neither Lee nor Wulff teach a gripping member moving transversely into the housing opening and a gripping member for frictionally gripping a battery placed in said cavity.

In response, Lee teaches a housing (3) having a battery receiving cavity, said cavity being profiled to receive at least a battery therein (Fig.3A); said housing further comprising an opening through said housing and into said cavity and a gripping member (71) movable transversely into (Fig.3A) and out (Fig.3B) of said housing opening, the

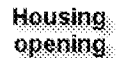
Art Unit: 2858

gripper member (71) being forced transversely into the battery (5) in the locked position for frictionally (friction between gripping member 71 and battery element 51) gripping a battery placed within said cavity (Fig.3A).

FIG. 3A



Housing



Gripping member

In response, Lee teaches a housing (3) having a battery receiving cavity, said cavity being profiled to receive at least a battery therein (Fig.3A), electrodes for contacting contacts on the battery for charging the battery (Col.3, Lines 39-41); said housing further comprising an opening through said housing and into said cavity and a gripping member (71) movable transversely into and out of said housing opening (Fig.3A), between a locked (Col.4, Lines 10-12) and unlocked position (Col.4, Lines 19-

Art Unit: 2858

23), the gripper member (71) being forced transversely into the battery (5) in the locked position for frictionally (friction between gripping member 71 and battery element 51) gripping a battery placed within said cavity (Fig.3A).

Lee does not explicitly teach a cam assembly nor that the gripping member is operatively connected and movable by operation of said cam assembly.

Wulff teaches a cam assembly and a gripping member that is movable by operation of said cam assembly (Col.5, Lines 54-57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have had the teachings of Wulff in the device of Lee to have released or engaged a battery by use of a cam or wheel rotating on a shaft (Col.5, Lines 54-57).

The rejection is based on the combination of these references.

Appellant argues the Examiner has not provided articulated reasoning for the combination of Lee and Wulff.

In response, Lee does not explicitly teach a cam assembly nor that the gripping member is operatively connected and movable by operation of said cam assembly.

Wulff teaches a cam assembly and a gripping member that is movable by operation of said cam assembly to release or engage a battery by use of said cam assembly (Col.5, Lines 54-57).

To have released or engaged a battery, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Lee to have the gripping member be movable by operation of a cam assembly as taught in Wulff.

Claim 10 is patentable over the combination of Lee and Wulff

With respect to claim 10, the appellant arguments that none of the references show the alternative of the battery receiving cavity profiled to receive a battery connected to its hand-held appliance.

In response, Lee teaches the alternative of the battery receiving cavity receiving a battery alone (Fig.3A).

Claim 11 is patentable over the combination of Lee, Wulff and Taylor

With respect to claim 11, the appellant arguments that the Examiner did not provide articulated reasoning to support the conclusion of obviousness for the combination of Lee, Wulff and Taylor.

In response, Lee does not explicitly teach said battery receiving cavity includes guides along the insertion axis of the cavity for holding the battery alone.

Taylor teaches a battery charger comprising guides (362 and 368) along the insertion axis of a battery (420) for holding the battery alone (Fig.5) (Col.9, Lines 36-42) to guide the battery into a charging position (Col.9, Lines 54-61).

Therefore to guide the battery into a charging position, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have

Art Unit: 2858

modified Lee to have guides along the insertion axis of the battery receiving cavity as taught in Taylor.

Claim 12 is patentable over the combination of Lee, Wulff and Taylor

With respect to claim 12, the appellant arguments that the Examiner did not provide articulated reasoning to support the conclusion of obviousness for the combination of Lee, Wulff and Taylor.

In response, Lee does not explicitly teach said guides are comprised of guide grooves along the insertion axis of a battery receiving cavity, and are profiled to receive ribs along an exterior of a battery.

Taylor teaches a battery charger comprising guide grooves (362 and 368) along the insertion axis of a battery (420) receiving cavity to guide the battery into a charging position (Col.9, Lines 54-61) that are profiled to receive ribs along an exterior of a battery (420) (Col.9, Lines 36-42).

Therefore to guide the battery into a charging position, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Lee to have guides along the insertion axis of the battery receiving cavity that are profiled to receive ribs along an exterior of a battery as taught in Taylor.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

Art Unit: 2858

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/J. A. T./

Examiner, Art Unit 2858

Conferees:

/Patrick J Assouad/

Supervisory Patent Examiner, Art Unit 2858

/David S Martin/

Review Examiner, TC 2800